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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/078,299 | 02/20/2002 | Ying Liu | | 3371 |
| 7590 03/23/2010 | | | | |
| Ying Liu, Ph.D. 1020 PineNeedle Dr. Savannah, GA 31410 | | | EXAMINER ROSARIO, DENNIS | |
| | | | ART UNIT 2624 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/078,299

Applicant(s)

LIU, YING

Examiner

DENNIS ROSARIO

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50, 52, 53 and 55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 50, 52, 53 and 55 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB006)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notes of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment was received on 6/8/09. Claims 50,52,53 and 55 are pending.

Claim Objections

2. Claims 50,52,53 and 55 are objected to because of the following informalities:

Claim 50, line 2 has Attrasoft Boltzman Machine with a single quotation mark and should have two quotation marks.

Claim 50, lines 12,13 has "(such as a division of 10 equal parts)" should to be deleted. See MPEP 2173.05(d).

Claim 50, lines 31,32 has "for example....*d)" should be deleted.

Thus, any examples in claim 50 should be deleted.

Claim 53 is objected to for the same reasons of claim 50 regarding the examples in claim 50. Thus, claims 52 and 55 are objected for depending on a respective parent claims 50 and 53, respectively.

Appropriate correction is required.

Specification

3. A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because there are multiple versions of the specification filed on 2/20/02,5/23/02,10/5/05,4/14/06,5/19/06,10/9/07,12/28/07 and 2/25/08 and the specification of 2/25/08 does not include a corresponding marked-up version such as in the specification of 10/9/07 on page 4:TECHNICAL FIELD:

"This invention can be used in image verification (1-to-1 matching, binary output: match/no match ~~4:1 matching, binary output: yes/no~~), image identi...

Thus two versions for the final specification are required:

A clean version without markings for example "This invention can be used in image verification (1-to-1 matching, binary output: match/no match), image identi..."; and a marked-up version showing the changes (as described above: "This invention can be used in image verification (1-to-1 matching, binary output: match/no match ~~4:1 matching, binary output: yes/no~~), image identi...") relative to the specification of 2/20/09.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version (filed on 2/20/02) of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

Allowable Subject Matter

4. Claims 50,52,53 and 55 are allowed.
5. The following is an examiner's statement of reasons for allowance:

Claim 50 is allowed because the prior art does not teach the newly amended potions. Thus, claim 52 is allowable, too.

Claim 53 is allowed for the same reasons as claim 50; thus, claim 55 is allowable, too.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. This application is in condition for allowance except for the following formal matters:

The objection to claims 50,52,53 and 55; and

A marked-up version and clean version of the specification relative to the original specification.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS ROSARIO whose telephone number is (571)272-7397. The examiner can normally be reached on 9-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571)272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew C Bella/
Supervisory Patent Examiner, Art Unit 2624

Dennis Rosario
Examiner
Art Unit 2624

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